

Assessment for Learning

Capacity Program for Teachers

Introduction

The quest for the improvement of education quality has been recognised as one of the most significant challenges facing the South African government, and is regarded as a national priority that requires involvement and engagement throughout all levels of our society...

This program seeks to address the challenge of improving learning by developing capacity and skills of teachers to address specific learning needs for all learners in South African schools. Specifically, the program focuses on supporting teachers in enhancing their classroom assessment knowledge and skills so as to improve learning and teaching. This program has been developed by staff of the Tshwane University of Technology, on behalf of the SADTU Curtis Nkondo Professional Development Institute...

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This guide has been based on the following assumptions and philosophy:

- All children can learn, and should be supported to develop their full potential.
- The primary responsibility of teachers is to support children to improve learning.
- Assessment is an integral part of the teaching and learning process.
- Assessment must be used to improve learning, and not only to measure learning.
- Assessment can only become formative if evidence is used to improve learning.
- Teaching and assessment practices should be adapted to suit the needs of learners.
- Reflective practice is critical to refine ideas and beliefs and to improve practice.

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Theories of Learning

Learning is best served when learners take responsibility for it and can transfer it across a range of contents where it is both authentic and valuable. For all learning theories, the idea of transfer involves generalization of learning to new situations. All theories of learning are based on fundamental assumptions about the person, the world, and their relations.

Assessment for Learning is drawn from the paradigm of constructivist learning theory. However, to understand current practices, it is important to remind ourselves where traditional views of testing came from. The measurement approach to classroom assessment presents barriers to the implementation of more constructivist approaches to assessment. Thus, dominant theories of the past continue to influence beliefs and practices of teachers, parents, policy makers.

What is behaviourism?

Behaviourism offers a particular perspective on how learning occurs and how teaching impacts that process. The instructional model that best reflects the tenets of behaviourism is referred to as direct instruction teaching. The hallmark of direct instruction is the active and directive role assumed by the teacher, who maintains control of the pace, sequence, and content of the lesson.

Assessment and Behaviourist Learning Theory

The central ideas of testing and measurement are closely linked to the behaviourist learning theories.

The importance of measurable and observable performance and the impact of the environment comprise foundational principles of the behaviourist approach to learning. The basic argument is that only observable, measurable behaviour is the appropriate object for measuring instruction. Key assumptions of the behaviouristic model had consequences for ensuring conceptualizations of teaching and testing:

- i. Learning occurs by accumulating atomized bits of knowledge;
- ii. Learning is tightly sequenced and hierarchical;
- iii. Transfer is limited, so each objective must be explicitly taught;
- iv. Tests should be used frequently to ensure mastery before proceeding to the next objective;
- v. Tests are isomorphic with learning (tests + learning);
- vi. Motivation is external and based on positive reinforcement of many small steps.

What is the problem with the behaviourist learning theory?

The research regarding direct instruction suggests that while it is an effective means of teaching factual content, there is less evidence that this instruction transfers to higher order cognitive skills such as reasoning and problem solving, nor is there sufficient evidence that direct-instruction teaching results in the flexibility necessary for students to use the targeted strategies in novel contexts. In addition to these practical concerns with the limitations of direct instruction, there are significant theoretical limitations of the behavioural perspective; namely, this perspective offers no satisfactory explanation of the mechanisms that account for learning.

What is constructivism?

The philosophy of constructivism in education is the emerging paradigm in teaching and learning.

Constructivism depicts learners as actively constructing their own knowledge, either individually or socially. The focal point of the constructivist learning pedagogy is to develop learner's ability to use their existing knowledge and existing experiences to construct meaning and/or new knowledge. The teacher encourages the active involvement of learners by establishing the authentic learning environment and promoting learning that engages learners into discussions. The basic premises of a constructivist learning pedagogy are that:

- **Learning is an active process** in which self-monitoring and self-regulation are central
- **Prior learning can help or hinder new learning** and needs to be taken into account.
- **Learning is both an individual and a social process** and is assisted by others (peers & teachers).
- **Feedback on learning is important** but learners need help and opportunities to improve.
- **Motivation and a learner's sense of self** are both a **condition for, and an outcome of**, learning and achievement.

Assessment and Constructivist Learning Theory

The paradigm of constructivist learning theory had led to re-examining the meaning of assessment.

Many of the newer developments in assessment are rooted in an interpretivist perspective. The interpretive paradigm brings out the importance of understanding a learner's response in relation to the learner's expectations of and assumptions about the classroom process, interpretation of the task demand, and the criteria for success. From this perspective, classroom assessment is characterized by the following:

- Challenging tasks to elicit high order thinking
- Addresses learning processes as well as learning outcomes
- An on-going process, integrated with instruction
- Used formatively in support of student learning
- Expectations visible to students
- Students active in evaluating their own work
- Used to evaluate teaching as well as student learning

In recognition of the constructivist notions of multiple realities, subjectivity and knowledge construction, assessment is perceived instead as a communal process not as a means to an end product.

Teachers' close assessment of students' understandings, feedback from peers, and student self-assessments are a central part of the social processes that mediate the development of intellectual abilities, construction of knowledge and formation of students' identities.

Zone of Proximal Development

The Zone of Proximal Development (ZPD) was a concept developed by Russian psychologist, Lev Vygotsky, to explain how children learn. Vygotsky argues that all learning takes place through social interaction and thus how one teaches children can have a significant impact on what they learn.

Vygotsky (1978) also introduced the ZPD, which he defined as the "distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (p. 86). Figure 7 provides an overview of how the ZPD operates in practice (Heritage, 2010).

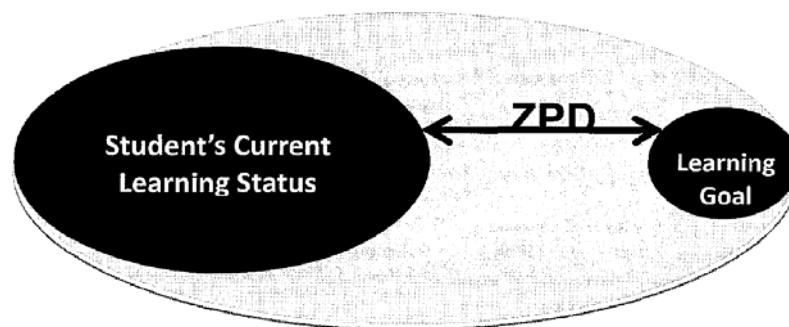


Figure 7: Overview of the Zone of Proximal Development

Vygotsky argues that it is within the ZPD that all learning takes place. The implications of Vygotsky's theories for teachers is noted by Allrich (n.d.) who notes that as learning proceeds, a portion of the Proximal Zone becomes part of the Present Knowledge, and as a consequence, a smaller Proximal Zone remains. In Figure 8, Allrich shows how the #1 Proximal Zone (diagram on the left) was incorporated into the present knowledge after learning occurred (diagram on the right). Hence, over time, Present Knowledge grows but there is always a Proximal Zone present, as people continue to learn new things throughout their lives (remember - the concept of life-long learning). Thus Allrich notes the ever-presence of the Distal Zone that represents knowledge to be learned later.

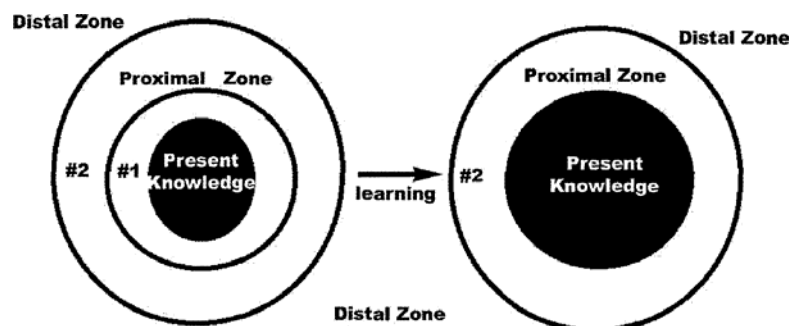


Figure 8: How learning takes place in the ZPD

Practical application of constructivist theory to assessments

1. Mindset for Positive Learning

Having the correct mindset for supporting learning is important for both learners and teachers. A fixed or performance mindset focuses on test results and on ability. A growth mindset emphasis effort and learning from your mistakes.

Learners with a fixed mindset think they've either 'got it or they haven't. When these learners experience failure, they see it as something lacking in themselves. Linking failure to their own lack of ability can make them lack persistence, opt out of difficult learning and be reluctant to try new things.

A growth mindset enables learners to create and work towards learning goals because they believe in themselves as learners with the capacity to improve. Learners with a growth mindset tend to respond to failure by redoubling their efforts, because they have hope that they will succeed. The harder it gets, the harder they try.

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Clarifying and sharing Learning Intentions and Success Criteria

This section deals with two key concepts:

1. the learning intention which refers to the new learning that learners will get from the next stage in their learning programme, and
2. success criteria: those parts of the learning activity that are essential in helping learners achieve the learning intention.

Making the learning focus clear, and providing supporting activities towards that learning, is something that all effective teachers do. However, it is often done orally, or written, usually on the board, and kept there until the board space is required for writing other information relevant to the lesson. However, research evidence suggests that making these vital elements visible throughout a lesson (or sequence of lessons) helps to focus learners' attention on them more effectively.

These two elements are usually made very noticeable and visually accessible to ALL learners throughout the duration of any lesson.

Learning intentions tell learners what they're going to learn.

Success criteria tell learners what to pay most attention to in their activity in order to get the desired learning out of it.

Sharing Learning Intentions

A learning intention is simply a description of what you want your learners to know, understand or be able to do by the end of a lesson. It tells learners what the focus for learning is going to be.

The concept of learning intentions is not new - as a teacher you devise learning intentions regularly. However, you may, instead, call them 'learning objectives', 'learning goals' or 'learning aims'. In AfL, the word 'intention' is used purposely because it puts greater emphasis on the process of learning rather than the end product.

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Sharing Success Criteria

If learning intentions describe what learners will learn during a lesson, then success criteria are the statements that help learners recognise if they have been successful in their learning.

Success criteria describe what success "looks like" and always directly linked to the learning intention. By referring to the success criteria, learners know if they have achieved the learning intention.

In AfL, success criteria:

- are linked to the learning intention;
- are specific to an activity;
- are discussed and agreed with the learners prior to beginning the learning activity;
- scaffold and focus learners while they are engaged in the activity; and
- are used as the basis for feedback and peer and self-assessment.

Why Use Success Criteria?

Success criteria are important because:

- the learning becomes more explicit - and clear,
- students can confirm, consolidate and integrate new knowledge
- future learning is scaffolded
- students can see what quality looks like.

Success criteria also ensures that teachers and the learners are focused on the criteria that the work will be assessed against, and thus be able to provide more accurate feedback.

Moreover, best practice suggests that teachers discuss and agree success criteria with the learners ahead of lessons and activities. The advantages are as follows:

- it helps foster a positive classroom environment;
- it encourages learners to be involved in the learning and upcoming activity even before it's begun;
- it can help build learner self-esteem by offering them opportunities to contribute; and
- its collaborative aspect is a useful tool to strengthen the teacher-learner relationship.

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Course: Education

23073, SADTU, First Module of Assessment for Learning, 2012, Excerpts

2007 words